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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,978	06/08/2001	Christian Trinh Van	160383.90228	2189
7590	05/10/2004		EXAMINER	
Michael J McGovern Quarles & Brady 411 East Wisconsin Avenue Milwaukee, WI 53202-4497			PERILLA, JASON M	
			ART UNIT	PAPER NUMBER
			2634	
			DATE MAILED: 05/10/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/806,978	VAN ET AL.
	Examiner Jason M Perilla	Art Unit 2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 June 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) 1-5 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 June 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. Claims 1-5 are pending in the instant application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The Examiner requests that the Applicant submits a (replacement) formal copy of the drawings as presented in the priority application. The record currently does not contain drawings for the application other than those found in the copy of the certified copy of the priority application.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure. *The Examiner requests that that the Applicant submits a replacement abstract.*

The abstract should be in narrative form and generally limited **to a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

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of the following is required: The limitations of claims 3 and 4 should be included in the specification.

6. The content of the specification is objected to because it does not contain appropriate headings. An amendment should be made by the Applicant to include applicable headings as described below.

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) Sequence Listing: See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Objections

7. Claim 1 recites the limitation "the transmission level" in line 6. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 1 recites the limitation "the code" in line 11. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 1 recites the limitation "the measurement" in line 12. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 1 recites the limitation "the curve" in line 14. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 1 recites the limitation "the reception level" in line 15. There is insufficient antecedent basis for this limitation in the claim.
12. Claim 1 recites the limitation "the error rate limit" in 15. There is insufficient antecedent basis for this limitation in the claim.

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13. Claim 1 recites the limitation "the projected safety margin" in line 16. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 2 recites the limitation "the connection" in line 1. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 3 is objected to as being dependent upon an objected parent claim.

16. Claim 4 recites the limitation "the additional measurement" in line 3. There is insufficient antecedent basis for this limitation in the claim.

17. Claim 5 is objected to as being dependent upon an objected parent claim.

Allowable Subject Matter

18. Indication of allowable subject matter is made with respect to claims 1-5. Only formal matters are outstanding.

19. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

20. The following claims drafted by the examiner and considered to distinguish patentably over the art of record in this application, are presented to applicant for consideration:

1. Process for establishing a digital data connection between a transmitter (1) and a receiver (3), linked by a transmission medium (2) that is subject to disturbance effects, a process in which a data signal is transmitted with a transmission level via the transmission medium (2), which data are protected by an error detection and correction code of known effectiveness, while adjusting the signal level that is received by the

receiver (3) so that only a limited number of errors are apparent, and the transmission level is then increased ensuring that a projected safety margin (M) is built-in to counter the effect of disturbances upon reception, the process being characterised in that: a pre-correction error rate measurement point (S1), for a received level (N1), is determined upon reception, depending on the effectiveness of the error correction and detection code with respect to the error rate, an anticipated post-correction error rate curve (C2) and its position in relation to the pre-correction error rate measurement point (S1) are determined, an acceptable error rate limit at some point along the anticipated post-correction error rate curve (C2) is chosen, and, starting from a the reception level (S2) on the anticipated post-correction error rate curve (C2) that relates to the acceptable error rate limit, the transmission level is increased according to the projected safety margin.

2. Process in accordance with claim 1, wherein the digital data connection is used to exchange connection-establishing data between the transmitter (1) and the receiver (3).
3. Process in accordance with claim 1, wherein, to check a measurement of the signal level (N1) received from the transmitter (1), the transmission level is varied by a set factor and then a check is made that the level (N1) of received signal varies by the same factor.
4. Process in accordance with claim 3, wherein an additional control measurement of the received level (N1) is made, once the transmission level has been previously increased by the set factor and the value of the additional control

measurement decreased by the stated factor is retained as the initial measurement value (N1).

5. Process in accordance with claim 4, wherein the transmission level is varied by controlling a calibrated attenuator (14) in an intermediate frequency stage of the transmitter (1).

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art is cited to further show the state of the art with respect to wireless transmission power levels.

U.S. Pat. No.5604730 to Tiedemann, Jr.

U.S. Pat. No. 5623486 to Dohi et al.

U.S. Pat. No. 5669066 to Borg et al.

U.S. Pat. No. 5802446 to Giorgi et al.

U.S. Pat. No. 5778030 to Bruckert et al.

U.S. Pat. No. 6421331 to Hulbert.

U.S. Pat. No. 5727033 to Weaver et al.

22. This application is in condition for allowance except for formal matters.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

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23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (703) 305-0374. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Chin can be reached on (703) 305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason M. Perilla
April 16, 2004

jmp



STEPHEN CHIN
SUPERVISORY PATENT EXAMINE
TECHNOLOGY CENTER 2600

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